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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,292	12/15/1999	SUNG-WOOK PARK	1293.1087/MD	3630

21171 7590 09/17/2003

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EXAMINER

NGUYEN, HUY THANH

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/461,292

Applicant(s)

PARK ET AL.

Examiner

HUY T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-48 and 66-69 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-18,21-24,27,28,49,50,53-57,60-62 and 65 is/are rejected.
- 7) ☒ Claim(s) 3,4,19,20,25,26,51,52,58,59,63 and 64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 8-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 8-14 direct to information stored on a medium. Since the stored information do not provide any functional relationship to the medium to control the medium to access the stored information or impart to software and hardware structural components to provide certain function that is processed by a computer, the stored information do not make them statutory. See MPEP 2100.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-2 , 5-9, 12-14,15-18,21-24,27,28 , 49-50,53-56,57,60-62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (6,181,870) in view of the admitted prior art figures 1-4.

Regarding claim 1, 8,15, 49, and 54, Okada discloses a apparatus and method (Figs. 17) to generate additional information to guaranteeing seamless playback, the method comprising generating data stream information for each of two or more data streams having packet data to which time information (Figs. 6,12,14 and 23) of the respective packet data is added, the data stream information including seamless playback information (Fig. 12), which indicates whether a corresponding data stream is to be seamlessly reproduced after playback of a preceding data stream, and/or seamless time control information to control an output time of the corresponding data stream to be seamlessly reproduced.

Okada fails to specifically teach adding the arrival time into packets . The admitted prior art figures 1-4 teaches apparatus for storing the stream data formed by packets having means for generating and adding arrival time information to the packets.

It would have bee obvious to one of ordinary skill in the art to modify Okada with the admitted prior art by providing the apparatus of Okada with a arrival time generating means for generating arrival time and adding the arrival time into packets

thereby enhancing the capability of the apparatus of Okada in searching the stream data packet to be reproduced.

Regarding claims 23 and 61, Okada discloses an editing apparatus (Fig. 17) to edit data recorded in a recording medium having a first area including a plurality of data streams including packet data to which information on the arrival time of the respective packet data is added, and a second area including data stream information having seamless information, which indicates whether a corresponding data stream is to be seamlessly reproduced after playback of a preceding data stream, and/or seamless time control information to control an output time of the corresponding data stream to be seamlessly reproduced, (figs 12 and 23) the editing apparatus comprising: a data information updator to analyze and update, after an editing of the plurality of data streams the data stream information by updating the seamless time control information so that data at either side of a boundary between data streams, at which seamless playback is not guaranteed, is seamlessly playbackable; and an editing controller to perform control such that the edited plurality of data streams are recorded in a first area of the recording medium and the updated data stream information is recorded in a second area of the recording medium (column 33, lines 25- 55, 61 –68, column 34, line13).

Okada fails to specifically teach adding the arrival time into packets . The admitted prior art teaches apparatus for storing the stream data formed by packets having means for generating and adding arrival time information to the packets.

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It would have been obvious to one of ordinary skill in the art to modify Okada with the admitted prior art by providing the apparatus of Okada with an arrival time generating means for generating arrival time and adding the arrival time into packets thereby enhancing the capability of the apparatus of Okada in searching the stream data packet to be reproduced.

Regarding claims 2, 18, 24, 50, 57 and 62, Okada as modified with the admitted prior art further teaches the seamless time control information includes a reference time, offset information and/or gap length information (See Okada Fig. 12, column 26, lines 5-27).

Regarding claims 5, 12, 21, 27, 53, 60 and 65, Okada further teaches that the gap length information is a value of an amount of time from an output time of a last packet of the preceding data stream to a time at which a first packet of the corresponding data stream to be seamlessly reproduced must be output (Fig. 12, column 28, lines 15-21).

Regarding claim 6, 13, 22, Okada further teaches that the seamless time control information is valid only when the seamless information has a value indicating "seamless playback" (fig. 12).

Regarding claims 7, 14, 16, 28 and 55, Okada as modified with the admitted prior art further teaches each of the data streams includes a plurality of packs, each pack including the packet data to which information on the arrival time of the respective packet data is added, and an extra header which is added to the packet data with arrival time information (See Okada and the admitted prior art).

Regarding claims 17 and 56 , Okada as modified with the admitted prior art further teaches a counter which is driven by a system clock signal and reset at [the] a moment when a first packet of each data stream is input, [for performing] the counter performing a counting operation and providing a count value to the arrival time information generator (See admitted prior art Figs 1-4).

Allowable Subject Matter

5. Claims 3, 4, 19, 20, 25, 26, 51, 52, 58, 59 and 63-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 29-48, and 66-69 are allowed over the cited art.

7. The following is a statement of reasons for the indication of allowable subject matter: the cited art do not teaches a playback apparatus for reproducing data recorded in a recording medium having a first area including a plurality of data streams including, packet data to which information on an original arrival time of the respective packet data is added, and a second area including data stream information having seamless information, which indicates whether a corresponding data stream is to be seamlessly reproduced after playback of a preceding data stream, and/or seamless time control information to control an output time of the corresponding data stream to be seamlessly reproduced, the playback apparatus comprising a combination of :

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a counter which is driven by a system clock signal and reset according to original arrival time information which has been added to a packet that is first reproduced by the playback controller;

a first processor to modified original arrival time information of a corresponding data stream to be seamlessly reproduced so as to provide modified arrival time information, or to provide a control signal indicating a time when the counter is to be reset, based on the data stream information provided from the playback controller; and

a second processor to control output of the data streams by removing the original arrival time information which is added to the packet data in the corresponding data stream, which is provided from the playback controller, in response to the output of the first processor as specified in claims 29,37 and 66.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kashiwagi et al teaches a recording/reproducing apparatus for seamlessly reproducing data packets.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 TECH CENTER customer service whose telephone number is (703) 306-0377.

H.N


HUY NGUYEN
PRIMARY EXAMINER